Department of Administration

Information Technology Plan

For 2014-2016 Biennium

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Contents

1 INTRODUCTION

1.1 PURPOSE

The purpose of this document is to provide agency data for the Information Technology Plan for the 2014-2016 Biennium to the North Carolina State Chief Information Officer (SCIO) as required by G.S. 147-33.72B. The statute mandates that each agency submit a technology plan to the SCIO by October 1 of each even-numbered year. The State Information Technology Plan (Plan) is required to cover a five-year time period. To properly inform the Plan, agency plans are also required to cover a five-year time period.

1.2 ROADMAP

Goal	Objective	Initiative	Description	Funding Mechanism
Goal 1 Provide IT support for daily business operations.	Objective 1.1 Maintain highly efficient information systems.	Initiative 1.1.1	Application issues resolved and data entry errors corrected within SLA.	Appropriations
		Initiative 1.1.2	Web issues resolved and changes made within SLA.	Appropriations
	Objective 1.2 Maintain software standardization.	Initiative 1.2.1	Convert old systems to standard architect.	Appropriations
		Initiative 1.2.2	Adhere to n-1software release guideline.	Appropriations
Goal 2 State Construction/UNC GA Initiative.	Objective 2.1 CAPSTAT Replacement.	Initiative 2.1.1	Modify the existing SCO InterScope system.	UNC_GA is funding
	Objective 2.2 Improve Project Management.	Initiative 2.2.1	Project Management data transfer.	UNC_GA is funding
	Objective 2.3 Data Transfer to HUBSCO.	Initiative 2.3.1	Transfer HUB participation data from InterScope to HUBSCO.	UNC_GA is funding
Goal 3 Maximize surplus property revenue.	Objective 3.1 Replace current system.	Initiative 3.1.1	Replace current system.	Receipts

Goal	Objective	Initiative	Description	Funding Mechanism
Goal 4 Procurement Transformation.	Objective 4.1 Electronic Bidding.	Initiative 4.1.1	Enhancement to current Ariba Buyer system to allow for electronic bid submission and strategic sourcing; this will generate significant efficiency improvements	e-Commerce Fund
	Objective 4.2 Contract Management.	Initiative 4.2.1	Enhancement to current Ariba Buyer system to enable "back end" contract management by keeping a record of vendor contacts made, contract terms and conditions, milestones, deliverables	e-Commerce Fund
	Objective 4.3 Document Management	Initiative 4.3.1	Enhancement to allow for electronic document storage	e-Commerce Fund
	Objective 4.4 Spend Analysis.	Initiative 4.4.1	Enhancement to enable data collection, analysis and reporting from multiple sources of data	e-Commerce Fund
	Objective 4.5 Vendor Registration.	Initiative 4.51	Single vendor repository	e-Commerce Fund
Goal 5 ArcGIS Online for Organization.	Objective 5.1 GIS Cloud-Based Platform.	Initiative 5.1.1	Launch GIS Cloud-Based Site.	Appropriations
		Initiative 5.1.2	Educate and Train	Appropriation
	Objective 5.2 GIS Data Develop.	Initiative 5.2.1	Key Data Layer Development.	Appropriation
		Initiative 5.2.2	Publish The Data (Web Services	Appropriation

2 DOA IT PLAN EXECUTIVE SUMMARY

The Department of Administration, often referred to as the "business manager" of state government oversees such operations as the acquisition and disposal of real property, building construction, purchase and contract of goods and services with an emphasis on historically underutilized businesses, the disposal of state and federal surplus property, management of state owned vehicles, parking, processing and delivery of mail, facility maintenance, and police protection for state government property.

Additionally, DOA hosts a variety of boards and commissions that advocate for citizens of North Carolina including the NC Human Relations Commission, NC Commission of Indian Affairs, NC Council for Women, Historically Underutilized Business Office, Youth Advocacy and Involvement Office, and the Domestic Violence Commission. Other citizen service organizations within the department include Veterans Affairs and Non-Public Education.

3 GUIDANCE

3.1 SCIO GUIDANCE

IT Vision

Making government services more accessible and efficient for all consumers is the foundation of the One IT strategy.

IT Mission

Promoting a stronger North Carolina that connects citizens, businesses, education, and government is the mission of IT.

IT Strategies

Strategies focus organizations to achieve complicated goals or objectives. With an eye to the future while sustaining current foundational requirements, the SCIO has adopted the "ABC" strategy to fix and modernize IT.
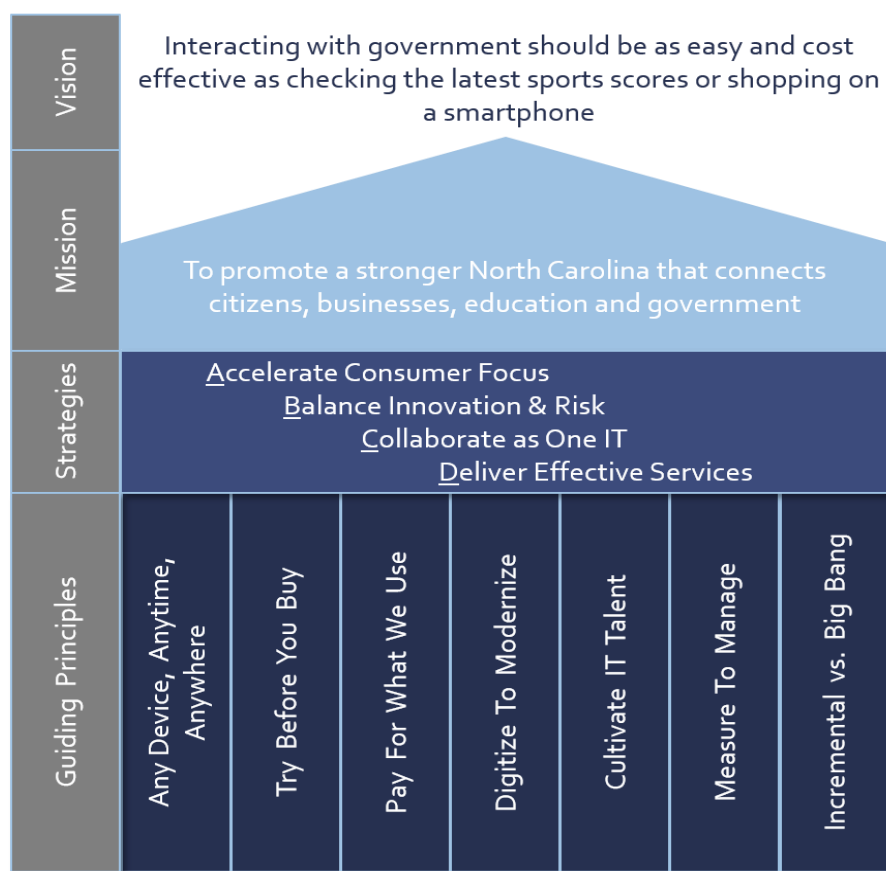
IT Vision, Mission, and Strategies

	Strategy	Intended to:
A.	Accelerate Consumer Focus	Embrace the consumerization of IT with a focus on the requirements of the consumer of technology
B.	Balance Innovation and Risk	Try newer technologies while managing enterprise risk
C.	Collaborate as One IT	Work as a team to accomplish our mission
D.	Deliver Effective Operations	Focus on achieving business outcomes through effective and efficient technology delivery

In addition to the seven guiding principles outlined above, the SCIO's Cabinet Unite IT Strategy focuses strongly on collaborative IT governance, big data and analytics (to include, but not limited to, work with GDAC and GIS), IT operations, and innovation.

The table below outlines the six IT business capabilities and five IT organizational capabilities highlighted in the Cabinet Unite IT Strategy.

Business Capabilities	Organizational Capabilities
Digital Focus	Collaborative IT Governance
Big Data and Analytics	Strategic Planning and Architecture
Enterprise Resource Planning	IT Program and Project Management
Application and Service Modernization	Innovation
Risk Management and Security	Talent Development and Management
IT Operations	

Please consider these areas, along with the seven guiding principles and your agency-specific goals and objectives when creating agency IT goals and objectives.

4 DOA VISION, MISSION, VALUES AND GOALS

4.1 VISION

Support Governor McCrory's priorities of building the economy, reforming education and promoting government efficiency. Specifically in the area of government efficiency by making it easier for vendors to do business with the State, streamlining the process for government entities who utilized statewide procurement contracts, moving to the digital environment for bidding and contract management, improving the analysis of State spending so as to leverage our size and reduce per unit costs, and maximizing the revenue from the sale of surplus property.

4.2 MISSION

To deliver services for other state agencies, state employees, our communities, and our fellow citizens effectively, responsively, and cost-efficient

4.3 VALUES

- Sharing Knowledge: Increasing Methods of Communication, both externally and internally.

- High Expectations: Putting forth Standard Operating Policies that engender clear expectations for employees and increase accountability to the public.

- Cooperation: We will value and strive to increase relationships among our Divisions to be cost-efficient and effective for the public.

- Empowerment: Employees' initiatives are to be valued and empowered.

- Transparency: We will measure the important tasks that we perform for the public.

4.4 AGENCY GOALS

- Decrease average review and processing times without compromising the quality of the outcome.
- Provide resources and representation for various segments of the population that have special needs so that they may achieve fair and equitable opportunities.
- Apply improved procedures, systems, organization, and good business practices to help agencies, grantees and customers achieve savings or other key goals such as compliance.
- Reduce energy use through improved management of facilities and vehicles.
- Provide quality services for citizens and public agencies that make government more accessible and open.

- Provide administrative support to independent state government agencies, including the State Ethics Commission, The License To Give Trust Fund, the Office of the Lieutenant Governor, the Office of State Personnel, and the State Board of Elections.

5 DOA IT VISION, MISSION, AND VALUES

5.1 IT VISION

Department of Administration agencies and divisions are recognizing the need to make greater use of technology to improve their effectiveness and efficiency. MIS will need to support their plans to develop, implement and maintain applications and web pages. To do

5.2 IT MISSION

Department of Administration agencies and divisions are recognizing the need to make greater use of technology to improve their effectiveness and efficiency. Management Information System's mission is to support their plans to develop, implement and maintain applications and web pages. To do this, while continuing to provide a high level of customer service, we will:

- Continue to provide resources and/or training to Division's on new technology as it is implemented.
- Ongoing conversion to standard system architecture as workload permits.
- Enhance service through redeployment or expansion of staff so that all divisions have equal access to our services.

5.3 IT VALUES

Below are some competencies that promote the value and use of IT to meet the business needs of agencies and governmental programs. Note that they are primarily business oriented—not technology related. These include awareness and understanding of:

- Principles and concepts of investment management, especially for evaluating and selecting and prioritizing investment opportunities, including related governance processes and criteria-based (such as cost, value, and risk) investment analysis.
- Processes and practices to develop IT strategies and initiatives for meeting organizational visions and missions and for achieving related business goals and objectives.
- Business models and the organizational structures, business processes, and staffing skills that are congruent with them and critical to their success and sustainability.
- The use, management, and governance of information for accomplishing business processes and performing governmental program activities.
- The confluence and interaction of workflows, people, and technology to meet business needs and deliver products and services.
- The uses of technology to meet business needs by innovating and improving the delivery of services; simplifying and enhancing interactions with the public; streamlining and improving business processes for realizing internal efficiencies, improving the effectiveness of operations, and enhancing the productivity of personnel; and contributing to the better morale of employees.

6 DOA IT GOALS, OBJECTIVES AND INITIATIVES

6.1 GOAL 1 - PROVIDE IT SUPPORT FOR DAILY BUSINESS OPERATIONS

Requests are prioritized based upon input from the business unit and executive management. High level requirements are documented and a budgetary estimate is provided. If approved, a detailed Project Plan is then developed with agreed upon dates. This ties into the "Deliver Effective Operations" strategy with the focus on achieving business outcomes through effective and efficient technology delivery.

6.1.1 Objective 1 - Maintain highly efficient information systems.

MIS provides analysis and computer programming for the department. They provide analysis of an agency's business processes for the purpose of defining business requirements that will enable an agency to be more efficient or reduce administrative costs. Based on the business requirements, they will make recommendations for an off the shelf software solution or design and develop a customized computer system that meets their business needs. They support several automated systems that are core to the department such as accounts receivables, accounts payables, inventory, case tracking, bid advertisements, and several third party off the shelf solutions.

6.1.1.1 Initiative 1 - Application issues resolved and data entry errors corrected within SLA.

Problem Resolution is based upon the priority – severity as described below:

- Priority 1 – Severe. This normally means that several people are affected and there is no work around until the problem is fixed. (1 hour response and 4 hour resolution.)
- Priority 2 – Medium. This usually means that a technical problem has occurred, but it affects only one person and there is a work around. (4 hour response and 1 day resolution.)
- Priority 3 – Low. This normally means that there is a technical problem, but it is sporadic. (1 day response and 1 week resolution.).

Data entry errors that involve changes to multiple tables, which cannot be corrected by the end user, are resolved within 24 hours of notification.

6.1.1.2 Initiative 2 - Web issues resolved and changes made within SLA.

MIS provides technical support for designing, developing or maintaining the department's website. It works with the Public Information Office (PIO) to see that departmental information is presented to the public in a consistent and concise manner. It works with the divisions to develop web applications to facilitate access to internal systems and automate manual processes.

Problem Resolution: Upon notification of a problem with a production web page, we will immediately begin problem identification and resolution.   (90% of incidents resolved within 2 hours).

Update Requests: All submitted requests shall be assigned a priority level and be responded to within the specified time frame:

- Time Sensitive: Same day if the ticket is received before noon.
- Standard Updates: Two business days maximum. Tickets are processed as they are received and generally are completed within 24 hours.

6.1.2 Objective 2 - Maintain software standardization.

Adhere to current standards for operating system and application software used in development or ongoing support of business systems.

6.1.2.1 Initiative 1 - Convert old systems to standard architect.

Convert code for existing systems to current standards, so as to optimize the utilization of staff resources and reduce vulnerabilities that may be existent in previous code.   This is done on a modular basis as we make minor modifications to meet new business needs, or if we become aware of a possible vulnerability.

6.1.2.2 Initiative 2 - Adhere to n-1software release guideline.

Adhere to the NC Statewide Technical Architecture – Platform Domain with regard to Section 2.1.8, which states: "*Maintain operating system versions to n-1: the most current major release (n) or at least to the last previously major revision (-1)*".

6.2 GOAL 2 - STATE CONSTRUCTION/UNC GA INITIATIVE

To have one integrated capital improvement project management and reporting system.

- Eliminate or minimize duplicate data entry
- Improve quality of information
- Enhance accountability

This reflects the Collaborate as One IT strategy.   Funding is being provided by UNC-GA.

6.2.1 Objective 1 - CAPSTAT Replacement.

Replace CAPSTAT (UNC-GA's capital project status system).

6.2.1.1 Initiative 1 - Modify the existing SCO InterScope system

Modify the existing State Construction InterScope system to replace UNC-GA's "CAPSTAT" capital project status system, including additional functionality for budget work flow, detailed HUB participation reporting, and general data reporting.

6.2.2 Objective 2 – Improve Project Management.

Reduce the need for duplicate data entry into State Construction Interscope system and UNC-GA Primavera system; thus improving operation efficiency and quality of data.

6.2.2.1 Initiative 1 – Project Management Data Transfer.

Provide data transfer capabilities between Interscope and Primavera P6.

6.2.3 Objective 3 - Data Transfer to HUBSCO.

Reduce the need for duplicate data entry into State Construction Interscope system and the Office for Historically Underutilized Businesses HUBSCO system; thus improving operation efficiency and quality of data.

6.2.3.1 Initiative 1 - Transfer HUB participation data from InterScope to HUBSCO.

Program necessary functionality to provide for HUB participation data to transfer from relevant fields in InterScope to appropriate fields in HUBSCO.

6.3 GOAL 3 - MAXIMIZE SURPLUS PROPERTY REVENUE

Maximize the revenue returned to the State through the sale of surplus property and improve processing efficiencies. This is being driven by the State Auditor's finding that receipts can be increased by 30% if we offer on-line bidding.

6.3.1 Objective 1 - Replace current system.

Replace the current system which supports seal bids for items with a system that provides on-line bidding.

6.3.1.1 Initiative 1 – Replace current system.

Determine requirement, issue RFP. select COTS, convert history, modify COTS to interface with DOA financial system, and implement.

6.4 GOAL 4 – PROCUREMENT TRANSFORMATION

As part of the overall Procurement Transformation Project, several key areas in which system improvements were cited as critical – once the Ariba Buyer upgrade was completed – include a need for additional modules to significantly automate and better integrate the services and processes that comprise the procurement process. Funding is being provided via the e-Commerce fund.

6.4.1 Objective 1 – Electronic Bidding.

Implement the capability for vendors to submit bids electronically, greatly reducing the amount of paper to be handled and stored. Currently, vendors receive notice of solicitations electronically, and they receive orders electronically. This software addition will make the entire solicitation process a seamless electronic sequence, and, once implemented, creates a possibility for electronic storage.

6.4.1.1 Initiative 1 – Implement Electronic Bidding.

Enhancement to current Ariba Buyer system to allow for electronic bid submission and strategic sourcing; this will generate significant efficiency improvements.

6.4.2 Objective 2 – Contract Management.

More efficiently and effectively manage procurement and sales contracts, IP licenses, internal agreements, etc. Automate and accelerate the entire contract lifecycle. Standardize and control contract development. Strengthen operational, contractual, and regulatory compliance.

6.4.2.1 Initiative 1 – Automated Contract Management.

Enhancement to current Ariba Buyer system to enable "back end" contract management by keeping a record of vendor contacts made, contract terms and conditions, milestones, deliverables.

6.4.3 Objective 3 – Document Management.

Provide a highly reliable, scalable, secure, and feature-rich electronic document management System for procurement related documents that can be utilized by agencies for their various document management needs. This system will be used by agencies to store and retrieve their procurement related document assets while also providing an environment where collaboration between non-co-located participants can be facilitated.

6.4.3.1 Initiative 1 – Electronic Document Repository.

Enhancement to allow for electronic document management and storage, and reduce the volume of paper document storage.

6.4.4 Objective 4 – Spend Analysis.

Incorporate a flexible, easy-to-use data analysis tool that will enable more accurate evaluation of how much and where the State spends funds in various good and service categories, in order to make more strategic and economical decisions on future purchases. As you may recall, SB404, which was passed unanimously in both chambers gave DOA authority to request procurement data from all state entities, enabling DOA to acquire the needed data to perform this analysis.   Recognizing that there are multiple systems (both purchasing and accounting) that are in use among agencies and institutions, and that funding may not be available for a single Statewide financial and business process system at this time, this software will enable DOA to access data from all these systems in order to obtain and analyze data in compliance with this law.

6.4.4.1 Initiative 1 – Implement Spend Analysis.

Enhancement to enable data collection, analysis and reporting from multiple sources of data.

6.4.5 Objective 5 – Vendor Registration.

Offer a single vendor registration system to those businesses that do, or wish to do, business with the State; rather than the two separate, duplicate systems currently required.

6.4.5.1 Initiative 1 – Single Statewide System.

Select a COTS or develop and implement a user-friendly, easy to maintain statewide vendor registration application.

6.5 GOAL 5 – ARCGIS ONLINE FOR ORGANIZATION

Increase the accessibility of GIS information utilized and/or created within the Department which will in turn make the Department and the State more efficient. Create a central cloud-based GIS platform for the Department to create, share, and access maps, mobile and desktop applications, and data (web services).)   Appropriations funding will be requested in the expansion budget.

6.5.1 Objective 1 – GIS Cloud-Based Platform.

Create a central cloud-based platform for the Department to create, share, access maps, mobile. and desktop applications, and data (web services).

6.5.1.1 Initiative 1 – Launch GIS Cloud-Based Site.

Purchase ArcGIS Online site and setup user accounts.

6.5.1.2 Initiative 2 – Educate and Train.

Educate and Train the Divisions on how to utilize the capabilities of the site.

6.5.2 Objective 2 – GIS Data Development.

Develop and enrich key data layers which can be utilized within the Department of Administration and by other departments for decision making purposes. .

6.5.2.1 Initiative 1 – Key Data Layer Development.

Review Departmental goals and survey the Divisions to develop a list of key data layers.   Develop data layers and assess the resources required to improve the quality of the data.

6.5.2.2 Initiative 2 – Publish The Data (Web Services).

Provide ubiquitous access to the State to create an environment for the creation of mobile and desktop applications.

7 DOA IT ORGANIZATIONAL STRUCTURE (REPORTING STRUCTURE)

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8 ADDITIONAL AGENCY REQUIREMENTS

8.1 INNOVATIVE FUNDING SOLUTIONS

Utilization of the e-Commerce fund for enhancement of statewide procurement to improve efficiency, streamline processes and reduce overall cost of doing business the State.

8.2 OPPORTUNITIES FOR STATEWIDE INITIATIVES

The department has identified several areas where a statewide approach to solve the business problem would benefit several agencies by reducing overall cost. Some of the key areas for statewide initiatives are as follows.

- **Accounts Receivable System:** DOA has three small A/R systems which don't interface with each other or NCAS, which place a manual burden on the Office of Fiscal Management's staff. Other departments face similar obstacles to improving the efficiency of their operation. This points out the need for a statewide system, which could be used by all departments.

- **Grant Management System:** DOA is a small player in the awarding of grants within state government, but we face the same resource constraints in reviewing, awarding and track grants. Several attempts have been made in the past to work with other department and ITS, but now that there is a legislative mandate, we are eager to participate in the requirements gathering and selections of a statewide system.

Appendix A: List of Major IT Projects

This purpose of this section is to provide list of major IT projects and applications (>$250,000) that are in progress or planned in this biennium. The table below maps each project to overall goals and strategies.

Project Name	Short Description	Related Goals and Objectives	Summary of Anticipated Benefits	Approximate Timeframe
State Construction / UNC GA Initiative	Replace CAPSTAT (UNC-GA's capital project status system)	Goal 2	One integrated capital improvement project management and reporting system. • Elimination or minimization of duplicate data entry • Improved quality of information • Enhanced accountability	Complete by 11/30/15
State Surplus Property System	Replace Surplus Property System and add e-Bay style bidding.	Goal 3	Maximize the revenue returned to the state through the sales of surplus property and improve surplus process efficiencies.	Complete by 7/31/15
Procurement Transformation	Procurement Transformation	Goal 4	Significantly automate and better integrate the services and processes that comprise the procurement process.	TBD
ARCGIS Online for Organization	Central cloud-based GIS platform for DOA.	Goal 5	Increased accessibility of GIS information utilized and/or created within DOA.	6/30/15

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